Series 760 FireLock™ Water Motor Alarm

UL AND FM RATED TO 300-PSI/21-BAR/2068-KPA ALLOWABLE PRESSURE VDS AND CE RATED TO 16-BAR/1600-KPA/232-PSI ALLOWABLE PRESSURE



A WARNING









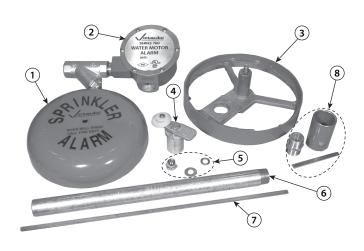




- · Read and understand all instructions before attempting to install any Victaulic piping products.
- . Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- . Wear safety glasses, hardhat, and foot protection.
- · Any activities that require removing the valve from service may eliminate the fire protection provided.
- Before removing the valve from service, notify the authority having jurisdiction (AHJ).
- Consideration of a fire patrol should be given in the affected areas.

Failure to follow these instructions could result in death or serious personal injury and property damage.

WATER MOTOR ALARM COMPONENTS



Item	Description	Qty.
1	Shell	1
2	Alarm Motor Housing with Strainer	1
3	Bracket	1
4	Striker Assembly	1
5	Lock Washer, Flat Washer, and Fastener	1 each
6	Connecting Nipple (¾-inch/26.9-mm Diameter)	1
7	Flat Drive Shaft	1

PARTS FOR AN ASSEMBLY THAT DOES NOT PENETRATE THROUGH A WALL*

Item	Description	Qty.
8	Jam Nut, Spacer, and Flat Drive Shaft (3½-inch/89-mm Length)	1 each

^{*}Item numbers 6 and 7, listed above, are the only parts not used for this assembly.

IMPORTANT INFORMATION

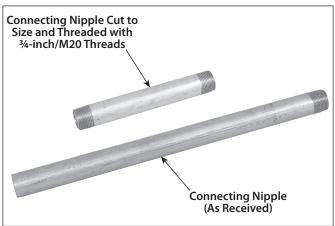
- The Series 760 Water Motor Alarm is UL and FM Rated to 300-psi/21-Bar/2068-kPa Allowable Pressure and VdS and CE Rated to 16-Bar/ 1600-kPa/232-psi Allowable Pressure.
- The standard water motor alarm assembly will accommodate wall thicknesses from 2 13 inches/51 330 mm. Wall thicknesses that fall outside this range must be specified at the time of order.
- The total length of alarm line piping shall not exceed 75 feet/23 meters.
- The water motor alarm shall not be located more than 20 feet/6 meters above the sprinkler control valve.
- Alarm line piping from a retard chamber to the water motor alarm shall be galvanized and ¾-inch/20-mm minimum in diameter. If pressure is low, or if longer runs of piping are necessary, larger diameter galvanized piping shall be used.
- A maximum of three sprinkler system control valves can be connected to one water motor alarm. The sprinkler system control valves shall be located in the same hazard area.
- A check valve shall be installed in the piping from each sprinkler system control valve to ensure proper operation of the water motor alarm.
- The ¾-inch/20-mm strainer (provided) shall be installed in the alarm line at the alarm motor housing's inlet.
- Drain piping shall be 1-inch/33.7-mm diameter.
- Piping shall be pitched so that water will drain back to the sprinkler system control valve and through a corrosion-resistant orifice no larger than 1/8 inch/3 mm.
- Drains shall be piped to a heated space where no personal injury, property damage, or freezing will occur when the alarm is operating.

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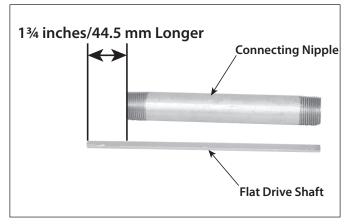
INSTALLATION OF WATER MOTOR ALARM (THROUGH A WALL)



1. Drill a 1¼-inch/32-mm hole in the appropriate location for the connecting nipple. In addition, drill a 1½-inch/41-mm hole in the appropriate location for the 1-inch/33.7-mm diameter drain nipple.



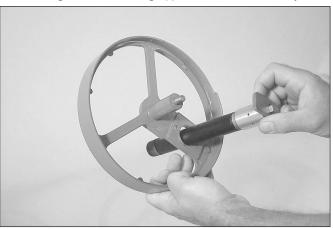
- 2. Cut the non-threaded end of the connecting nipple so that the length of the connecting nipple is %-inch/10-mm longer than the thickness of the wall.
- 2a. Thread the cut end of the connecting nipple with $\frac{3}{-inch}$ m20 threads.



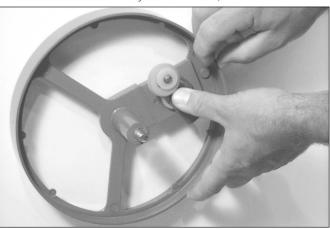
3. Measure and cut the flat drive shaft so that it is 1¾ inches/45 mm longer than the length of the connecting nipple. This flat drive shaft will be required in later steps.



4. Hand-tighten the connecting nipple into the striker assembly.



5. Insert the striker assembly into the bracket, as shown above.



6. From the exterior of the building, insert the bracket/striker assembly into the previously drilled 1¼-inch/32-mm hole. Make sure the bracket is flush against the wall.

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NOTICE

 For the following step, bracket on the exterior of the wall should be supported to ease installation of the alarm motor housing.



From the interior of the building, hand-tighten the alarm motor housing onto the end of the connecting nipple.



7a. Position the housing so that the inlet of the alarm motor housing with strainer is at the 9 o'clock position and the outlet is at the 6 o'clock position, as shown above.



8. Install the inlet piping from the strainer at the alarm motor housing to the alarm line connection of the sprinkler system control valve.



9. From the exterior of the building, position the bracket so that the striker will contact the lower portion of the shell.



10. While holding the bracket in position, tighten the assembly by using a wrench on the two flats on the striker shaft, as shown above. DO NOT over-tighten the assembly.



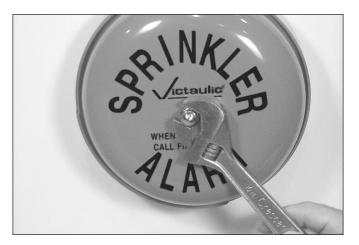
11. Install the shell onto the threaded stud of the bracket.



12. Install the flat washer and lock washer onto the threaded stud of the bracket.



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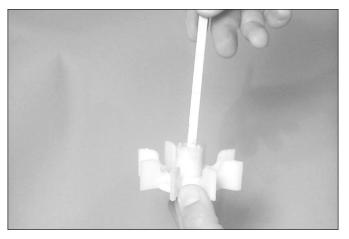
13. Tighten the shell securely with the supplied fastener.



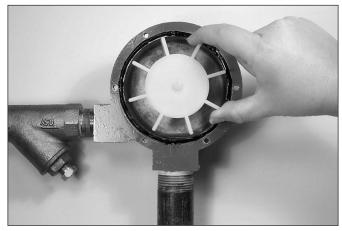
14. Install the 1-inch/33.7-mm diameter drain piping from the alarm motor housing's outlet to the drain location. **NOTE:** The drain must discharge through an open fitting.



15. Remove the six screws from the cover plate. Remove the cover plate and impeller. Verify that the factory-installed, non-hardening pliable sealant is intact within the groove in the alarm motor housing. If the sealant is not in good condition, remove all material and re-apply sealant/caulk into the groove, as needed.



16. Insert the flat drive shaft, that was cut in step 3 on page 2, into the impeller's slot.



17. Guide the flat drive shaft through the connecting nipple and into the slot of the striker assembly. Make sure the impeller is fully seated within the alarm motor housing. To ensure that the shaft is engaged correctly on both ends, spin the impeller to make sure there is no interference. Confirm that the striker rings the alarm.



18. Install the cover plate onto the alarm motor housing. Install and tighten the six screws to secure the cover plate to the alarm motor housing.

19. Test the assembly by flowing water through the alarm line. If the striker does not ring the alarm, remove the cover plate from the alarm motor housing and reposition the drive shaft and impeller.

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INSTALLATION OF WATER MOTOR ALARM (NOT THROUGH A WALL)



A jam nut, spacer, and $3\frac{1}{2}$ -inch/89-mm long flat drive shaft are provided for an installation that does not penetrate through a wall.



1. Install the jam nut into the alarm motor housing.



2. Insert the 3½-inch/89-mm long flat drive shaft into the impeller's



Install the spacer over the jam nut. Make sure the spacer is fully seated over the jam nut.



Install the bracket onto the alarm motor housing, along with the striker assembly, as shown above.



Make sure the striker assembly is pointing toward the outlet of the alarm motor housing, as shown above.



Tighten the assembly by using the two flats on the striker shaft, as shown above. **DO NOT** over-tighten the assembly.



Install the flat washer and lock washer onto the threaded stud of the bracket.



8. Tighten the shell securely with the supplied fastener.



- Install the inlet piping from the strainer at the alarm motor housing to the alarm line connection of the sprinkler system control valve.
- **9a.** Install the 1-inch/33.7-mm diameter drain piping from the alarm motor housing's outlet to the drain location. **NOTE:** The drain must discharge through an open fitting.

A CAUTION

 For installations that are not through a wall, support must be provided for the piping/water motor alarm assembly.

Failure to follow this instruction could result in product damage and/or property damage.

- After the piping is installed, proper support must be provided for the water motor alarm assembly.
- 11. Test the assembly by flowing water through the alarm line. If the striker does not ring the alarm, remove the cover plate from the alarm motor housing and reposition the drive shaft and impeller.

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INSTALLATION INSTRUCTIONS I-760

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